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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/142,326      01/27/99      HANSEN      H      ISIS-2447

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HM12/0103

EXAMINER

MARSCHER, A

ART UNIT	PAPER NUMBER
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1655

DATE MAILED:

01/03/00

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.  
09/142,326

Applicant(s)

Christensen et al.

Examiner

Ardin Marschel

Group Art Unit

1655



☒ Responsive to communication(s) filed on Oct 15, 1999

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1035 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claim

☒ Claim(s) 1-9 and 11-21 is/are pending in the application

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-9 is/are rejected.

☒ Claim(s) 11-21 is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☒ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☐ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, ~~232-246~~ (2 sheets)

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

Applicants' election of Group I (claims 1-9 and 11-21) in Paper No. 8, filed 10/15/99, is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (M.P.E.P. § 818.03(a)).

This application contains sequence disclosures that are encompassed by the definitions for nucleotide and/or amino acid sequences set forth in 37 CFR § 1.821(a)(1) and (a)(2). See page 22 of the instant specification, for example. However, this application fails to comply with the requirements of 37 CFR § 1.821 through 1.825 because no submission of a computer readable form of sequences has been submitted. Applicants are given the same response time regarding this failure to comply as that set forth to respond to this office action.

Claims 1-9 are rejected, as discussed below, under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for mimic compound practiced with the structure as given in claim 11, does not reasonably provide enablement for other generic mimics without any structural constraints as given in claim 1, for example. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims. The making of special polymers such as that of claim 11 requires reasonably detailed

synthetic, base protection, and base deprotection guidance for their preparation. Additionally, the interbase distance must be carefully designed to permit hybridization as required in any instantly discussed use. Only structures such as given in claim 11 are described in the instant specification with any guidance whatsoever as to synthesis thus leaving the broader generic scope of instant claim 1, for example, lacking in enablement.

Claims 1-9 are rejected, as discussed below, under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, lines 6-9, the substitution of a bulky substituent is described as being substituted onto "said bases" at a position that is "one, two or three atoms removed from the position of attachment of said base to the backbone". This causes the claim to be vague and indefinite due to unclarity as to where these attachment points may be within the metes and bounds of the claim. It is firstly noted that a moiety "A" is present in most of the mimic embodiments as depicted in the structure in claim 11 as formula (I). This moiety separates the base, which may be "L<sup>x</sup>", from the backbone attachment site of "A<sup>x</sup>" which is at "B<sup>x</sup>". The presence of this moiety "A" causes the phrase "position of attachment of said base to the backbone" to have two confusing interpretations. One is that the

attachment is at "B\*" and the other is that the attachment is at "L\*". Which site is the start for the count of the one, two or three atoms in said lines 6-9 of claim 1? Clarification via clearer claim wording is requested. Claims 2-9 also contain this unclarity.

Claims 11-21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

No claim is allowed.

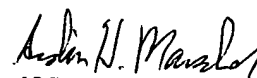
Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Group 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993) (See 37 CFR § 1.6(d)). The CM1 Fax Center number is either (703) 308-4242 or (703) 305-3014.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ardin Marschel, Ph.D., whose telephone number is (703) 308-3894. The examiner can normally be reached on Monday-Friday from 8 A.M. to 4 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, W. Gary Jones, can be reached on (703) 308-1152.

Any inquiry of a general nature or relating to the status of this application should be directed to the Chemical Matrix receptionist whose telephone number is (703) 308-0196.

December 30, 1999

  
ARDIN H. MARSCHEL  
PRIMARY EXAMINER